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16	NORTHERN DISTRI	DISTRICT COURT CT OF CALIFORNIA DIVISION
17 18	REARDEN LLC, et al.,	No. 4:17–CV 04006-JST-SK
19	Plaintiffs,	No. 4:17–CV-04191-JST-SK
20	V.	REDACTED VERSION OF DOCUMENT PER COURT ORDER
	THE WALT DISNEY COMPANY, et al.,	DATED DECEMBER 3, 2020
21	Defendants.	MEMORANDUM OF POINTS AND
22	REARDEN LLC, et al.,	AUTHORITIES IN OPPOSITION TO MOTION FOR PARTIAL SUMMARY
23	Plaintiffs, v.	JUDGMENT ON CAUSAL NEXUS ISSUE
2425	TWENTIETH CENTURY FOX FILM CORPORATION, et al.,	Judge: Hon. Jon S. Tigar Date: To be set
26	Defendants.	Time: To be set
27		Ctrm.: 6, 2 nd Floor
28		

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INTRODUCTION

Rearden LLC and Rearden Mova LLC (collectively, "Rearden") filed this vicarious and contributory copyright infringement case against defendants for copying Rearden's Contour Reality Capture software ("Contour program"), a program that implements the Contour facial performance capture technology ("Contour system"). In addition to its lost profits, Rearden seeks the portion of defendants' film profits that is attributable to their infringements of the Contour program copyright as authorized by 17 U.S.C. § 504(b) of the Copyright Act. Defendants have moved for partial summary judgment on a narrow damages issue. They argue that Rearden's claim for a portion of their film profits requires proof that the profits were caused at least in part by their infringements, and that here the causal relationship is so attenuated that there can be no "nexus" as a matter of law.

But in the pages that follow, Rearden proves that defendants chose to expressly tout their use of "MOVA" when they marketed the films at issue to filmgoers. It follows that a jury could reasonably conclude that their marketing efforts had the desired effect: they influenced at least in part filmgoer purchasing decisions. *See, Rearden LLC v. Crystal Dynamics, Inc.*, 2019 WL 8275254, *9 (N.D. Cal. 2019) (touting use of MOVA in video game promotion supports a jury inference that the infringer obtained direct financial benefit from Contour copyright infringement).

For example, Disney's *Beauty and the Beast* press kits touted its use of "MOVA" to make the computer graphics ("CG") Beast character, and MOVA's first ever use to make a CG romantic hero. The film's director Bill Condon and producer David Hoberman both repeatedly emphasized to the press Disney's use of MOVA to make the CG Beast. And actor Dan Stevens, who played the Beast, repeatedly described in interviews and press conferences how Disney used MOVA to capture his performance. In Disney's trailer for the film, the CG Beast—revealed to audiences for the first time—appeared almost exclusively in MOVA-based CG. Similarly, Marvel's president Kevin Feige described the use of MOVA to capture Josh Brolin's performance as Thanos in *Guardians of the Galaxy* to the press. Marvel issued a joint press release with Luma Pictures, the visual effects

Defendants refer to the Contour system as "MOVA," the name of the Rearden entity that offers Contour. Here, the two terms will be used interchangeably as context dictates.

("VFX") studio that made the CG Thanos character, describing their use of MOVA. And the "making of" featurettes for *Beauty and the Beast* and *Deadpool* both featured their use of "MOVA."

These were not isolated incidents, but rather the product of defendants' firm pre-litigation belief that the "magic" of MOVA would interest filmgoers. Of all the technology and artistry that defendants' brief and declarations detail in describing the end-to-end animation pipeline of a CG character, defendants chose MOVA to tout to potential audiences. Defendants used MOVA to create a sense of *excitement and anticipation* in potential audiences, to give them the impression that they would see something *new and revolutionary* in the films at issue, *to act as a draw to audiences*.

Professor Angela Tinwell, testifying by declaration, confirms that use of Contour in *Beauty* and the Beast was necessary to make a CG romantic hero with whom audiences could empathize. She is an expert on human response to CG characters in films and games, based on extensive experiments with human subjects. Condon and Hoberman confirmed that audience empathy for the CG Beast was essential to the film's success. Dr. Tinwell testifies that defendants' use of Contour allowed the capture of facial expression subtleties and nuances that, if not captured, would have prevented the audience from empathizing with the Beast. She concludes that, in her opinion, Beauty and the Beast revenue can be attributed at least in part to Disney's use of Contour. And former Fox International film executive Philip Fier's declaration confirms that Disney's use of Contour to make the Beast in its Beauty and the Beast trailer likely influenced filmgoers' decisions to see the film.

Defendants' argument that no one could possibly have been influenced to see the films at issue even in part because they used "MOVA," use that requires making *countless* infringing copies of the Contour program, cannot be reconciled with their choice to expressly feature "MOVA" to market and promote the films to potential audiences. And their contentions that MOVA is only the beginning of a CG character's long animation pipeline, that the cost of MOVA was only a small part of their VFX budgets, and that use of MOVA is only one of the many possible reasons a filmgoer might choose to see a film, are not relevant. Of all the steps in the CG character animation pipeline that defendants detail here, they believed that MOVA had the most potential to draw audiences to see the films at issue. How important MOVA was, relative to the other steps that they never mentioned,

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is a matter of apportionment. Apportionment is Defendants' burden to prove under Section 504(b) of the Copyright Act, and it has *no relevance* to the issue of causal nexus raised by Defendants motion.

Accordingly, the Court should deny defendants' partial summary judgment motion.

BACKGROUND FACTS

Rearden invented the Contour facial performance capture system, which was publically unveiled on July 31, 2006. The Contour program that controls the system is copyright-protected.

Contour is an arc-shaped rig and computers running the Contour program to control 27 cameras and panels of natural and ultraviolet lights. The actor wears phosphor-based makeup, which provides thousands of glowing points of reference in a random pattern. During the performance, the Contour program alternately flashes the natural and ultraviolet lights more rapidly than the eye can detect, and alternately opens and closes the camera apertures to capture the performance under the natural lights. The captured video is fed into the Contour program, which processes it into "raw scans." Then the raw scans are fed back into Contour to re-process them into a "tracked mesh," which replicates the surface of the performer's face in three dimensions from frame-to-frame at a sub-millimeter level of precision never before achievable with conventional hand animation or marker-based technologies. VFX artists can retarget the tracked mesh to the face of a CG character, such that the character's face displays every subtle nuance of the actor's captured facial performance.

Contour's unveiling created a sensation. Within days, production began on the first released film using the Contour system, *The Curious Case of Benjamin Button*. The photorealistic reverseaging of Brad Pitt's face was widely lauded as a VFX milestone, winning an Oscar for Best Visual Effects. Thereafter, film studios lined up to hire Rearden to use the Contour system in fifteen films, including Disney's *TRON: Legacy, Pirates of the Caribbean: On Stranger Tides, John Carter*, and *The Avengers*, and Fox's *Percy Jackson and the Olympians: The Lightning Thief*.

Digital Domain 3.0 ("DD3") wrongfully appropriated the Contour system. Defendants, acting through a spider's web of gossamer subsidiaries, contracted with DD3 to perform facial performance capture on *Beauty and the Beast, Avengers: Age of Ultron, Guardians of the Galaxy, Deadpool, Night at the Museum: Secret of the Tomb,* and *Fantastic Four* (the "films at issue").

Each time defendants used the Contour system, whether for facial performance capture, processing captured video into raw scans, or re-processing raw scans into tracked mesh, each computer made a copy of the Contour program in random access memory ("RAM"). Each copy infringed the Contour program copyright, *likely thousands of infringements for the films at issue*.

ARGUMENT

I. REARDEN'S BURDEN ON SUMMARY JUDGMENT

A. The Summary Judgment Standard.

Under Fed. R. Civ. P. 56(a), a court may not grant a summary judgment motion unless there is "no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). A dispute is genuine "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The court cannot engage in credibility determinations or weighing of the evidence. *Id.*, at 255. Rather, the non-moving party's evidence must be believed. *Id.* And the court must draw all reasonable inferences in favor of the nonmovant. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 US 574, 587 (1986).

B. The Gross Revenue at Issue.

The Copyright Act provides for recovery of "any profits of the infringer that are attributable to the infringement." 17 U.S.C. § 504(b). A copyright owner is entitled to an award of the infringer's profits "[t]o take away incentives for would-be infringers" and "to prevent the infringer from unfairly benefitting from a wrongful act." *Polar Bear Prod., Inc. v. Timex Corp.,* 384 F.3d 700, 708 (9th Cir. 2004); H.R. Rep. No. 94-1476, § 504, at 161 (1976). Both direct profits (from sales of infringing products), and indirect profits (from sales of products marketed or promoted by infringement), are recoverable. *Polar Bear,* 384 F.3d at 708, 710. The statute also divides the evidentiary burden for proving infringer profits between the parties: "In establishing the infringer's profits, the copyright owner is required to present proof only of the infringer's gross revenue, and the infringer is required to prove his or her deductible expenses and the elements of profit attributable to factors other than the copyrighted work." *Id.*, at 707; 17 USC § 504(b).

Although the plaintiff must prove only "gross revenue," "the ['attributable to the infringement'] causation element of the statute serves as a logical parameter to the range of gross profits a copyright plaintiff may seek." *Polar Bear*, 384 F.3d at 711. Consequently, "a copyright owner is required to do more *initially* than toss up an undifferentiated gross revenue number; the revenue stream must bear a legally significant relationship to the infringement." *Id.*, at 711. "[T]he plaintiff in a copyright action against a multidivision, multi-product company such as General Mills" may not simply "offer an overall gross revenue number—like \$11.5 billion—and sit back." *Id.*, at 711. "[C]laiming profits beyond what *might be* attributable to the infringement" is the "good deal of mischief" that the *Polar Bear* court said the causation element obviates. *Id.*

Here, the "gross revenue" at issue is not defendants' overall gross revenue from all their divisions, films, and other sources of revenue, but only the revenue from the specific films that defendants made and promoted by infringing the Contour program. Thus, for example, although The Walt Disney Company reported over \$55 billion in revenue from all sources for the fiscal year ended September 30, 2017 (*Beauty and the Beast* was released in March, 2017),² the "gross revenue" at issue for that film here is only the revenue that Disney derived from *Beauty and the Beast* in 2017 and thereafter (less any deductible expenses and apportionment that defendants may later prove at the apportionment stage). Accordingly, Rearden's "gross revenue" claims meet the *initial* "logical parameter" and "legally significant relationship" requirements of *Polar Bear*.³

C. The Causal Nexus Between Gross Revenue and Infringement.

Section 504(b) "creates a two-step framework for recovery of indirect profits: 1) the copyright claimant must first show a causal nexus between the infringement and the gross revenue; and 2) once the causal nexus is shown, the infringer bears the burden of apportioning the profits that were not the result of infringement." *Id.*, at 711. In other words, causal nexus is a procedural fact issue in a copyright damages case, to shift the statutory burden from plaintiff (to prove gross revenue), to defendant (to prove expenses and profit attributable to non-infringing factors).

² https://thewaltdisneycompany.com/walt-disney-reports-fourth-quarter-full-year-earnins-fiscal-2017/

³ Revenue and profit estimates for the films at issue are provided in Declaration of Phil Fier, ¶18.

On "summary judgment, a copyright infringement plaintiff seeking to recover indirect profits damages under 17 U.S.C. § 504(b) must proffer some evidence to create a triable issue regarding whether the infringement at least partially caused the profits that the infringer generated as the result of the infringement." Mackie v. Rieser, 296 F.3d 909, 911 (9th Cir. 2002); Polar Bear, 384 F.3d at 711. The causal nexus element of a copyright damages case parallels the "direct financial benefit" element of a vicarious infringement case. "Financial benefit exists where the availability of infringing material acts as a draw for customers." Ellison v. Robertson, 357 F.3d 1072, 1078 (9th Cir. 2004). "[T]he size of the 'draw' relative to a defendant's overall business is immaterial." Perfect 10, Inc. v. Giganews, Inc., 847 F.3d 657, 673 (9th Cir. 2017). Rather, "[t]he essential aspect of the direct financial benefit inquiry is whether there is a causal relationship between the infringing activity and any financial benefit a defendant reaps, regardless of how substantial the benefit is in proportion to a defendant's overall profits." Id., quoting Ellison, 357 F.3d at 1079.

To prove a causal nexus, Rearden is not required to submit declarations from filmgoers that their purchasing decisions were because of defendants' unauthorized copying. *Polar Bear*, 384 F.3d at 715; *Griffo v. Oculus VR, Inc.*, 2018 WL 6265067 at n. 13 (C.D. Cal. 2018); *Charter Sch. Capital, Inc. v. Charter Asset Mgmt. Fund, L.P.*, 2016 WL 5921062 at n. 3 (C.D. Cal. 2016). Nor is Rearden required to show that defendants' copying of Contour was the *only* or even the *main* reason for film revenue. *Griffo*, 2018 WL 6265067 at *12; *Garcia v. Coleman*, 2009 WL 799393 at *4 (N.D. Cal. 2009); *see also, Mackie*, 296 F.3d at 911 (plaintiff must proffer evidence that the infringement "*at least partially* caused the profits that the infringer generated as the result of the infringement."). And causal nexus may be proved by circumstantial evidence. *Polar Bear*, 384 F.3d at 712; *Hendricks v. Physicians Skin & Weight Centers*, 2014 WL 12561621, *3 (C.D. Cal. 2014).

II. DEFENDANTS' UNAUTHORIZED COPYING OF THE CONTOUR PROGRAM AT LEAST PARTIALLY CAUSED REVENUE AND AVOIDANCE OF EXPENSE.

A. Defendants promoted their use of "MOVA" in the films at issue to act as a draw to filmgoers for the films at issue.

Before this case was filed, defendants firmly believed that "MOVA" would serve as a draw to filmgoers, because they advertised their use of MOVA when promoting the films at issue. Based on

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this evidence, a jury could reasonably infer that defendants were correct in viewing MOVA as a draw to filmgoers. *See, Crystal Dynamics*, 2019 WL 8275254 at *9 (advertising use of MOVA to promote a video game supports jury inference that infringer benefitted directly from infringement).

1. Print, press conferences, interviews, and social media "MOVA" promotions.

As early as March 4, 2015, two years before *Beauty and the Beast's* release, a film publicity firm hired by Disney identified the transformation of Dan Stevens into the Beast as a subject in which audiences would be interested. Rachel Kennedy, of Rachel Kennedy PR, wrote an email to director Bill Condon and producer David Hoberman with the subject "B&B: Beast development (Behind the scenes)," in which she said that cameramen would document Stevens's transformation:

It may be that Disney choose never to give away the magic of the beast, but it might be nice to have material, just in case.

There does seem to be an appetite for this

Ex. 1.4 Hoberman testified that Disney hired Ms. Kennedy to interest people in *Beauty and the Beast* to get them to see the film:

- Q. Who is Rachel Kennedy?
- A. She was the publicist for the film.
- Q. What does the publicist do?
- A. They I guess garner as much media attention to the film as they can.
- Q. And I guess what is the point of getting media attention to the film? [...]

THE WITNESS: I mean you always want media to come down to the set and write about the film.

[...]

- Q. So that they'd read about -- people would read about the film and hopefully come and see it; is that right?
- A. Yes.

Ex. 2 (Hoberman 37:1-25).

Disney agreed that audiences would have "an appetite" for "the magic of the Beast." Before the film's release, Disney prepared production notes and a press kit to provide information about the

⁴ Unless specified otherwise, "Ex." refers to exhibits to the Declaration of Mark Carlson.

1	film that Disney believed would interest filmgoers. Ex. 3 (press kit); Ex. 4 (production notes); Ex. 2
2	(Hoberman 65:9-67:15); Ex. 5 (Condon 32:18-34:9; 45:2-21). The press kit repeatedly touts
3	Disney's use of "MOVA" in the film. For example, under the heading "Behind the Magic on
4	Screen," the press kit described how MOVA was a "key" to the film's success:
5	One of the keys to a successful live-action adaptation of "Beauty and the Beast" lay with the Beast. The cursed creature has to look somewhat
6	believable and be someone with whom the audience will care for, but the technology needed to pull off such a feat did not exist until recently.
7 8	To create a realistic looking Beast in a real-world environment while maintaining Dan Stevens' performance, a combination of physical performance capture and MOVA facial capture technology was used.
9	Ex. 3, at DIS-REARDEN-07968; Ex. 4, at MAND-REARDEN-01027. Disney's press kit also
10	described how the key MOVA facial capture technology worked:
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12	Stevens also participated in separate MOVA facial capture sessions which took place in an off-site studio. At these sessions, phosphorescent makeup was applied to Stevens' face, which appeared blue under ultraviolet light,
13	and he then filmed by multiple cameras surrounding him and tracking every pore in his face. The MOVA customized hardware and software
14	then converted the performance into data.
15	Ex. 3, at DIS-REARDEN-07969; Ex. 4, at MAND-REARDEN-01028.
16	One month before the film's release, on February 20, 2017, the director and cast of <i>Beauty</i>
17	and the Beast appeared at a press conference in Paris, published worldwide on YouTube, where Dan
18	Stevens, the actor who portrayed the Beast, introduced "MOVA" to the press:
19	the facial capture was done separately using a technology called MOVA . So every ten days, two weeks, we would go into—I would go
20	into a booth—spray my face with UV paint and 27 little cameras would capture the facial expressions of all the scenes that we had done
21	on previous days. [Co-star] Emma [Watson] would be sitting outside of the cage, and we would play the scenes again, just capturing the
22	face. They would take that information, morph it into the Beast, his face, and map it onto the body that I'd puppeteered on the set.
23	Ex. 6, at 12:10-13:18; Ex. 5 (Condon 104:14-25; 106:25-107:8); Ex. 7 at 0:55-2:32. Emma Watson,
24	who played Belle opposite Stevens's Beast, picked up on the press kits' "new technology" theme,
2526	and emphasized that "when you see Beast on screen, there is something so human about him, and so
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28	⁵ Mr. Stevens was an authorized representative and spokesperson for Disney. Ex. 8.

1	kind of, it really captures the subtlety of Dan's facial expressions and the performance that he gives,
2	which is, I don't think the world has seen anything like it before, because its really unique to our
3	film." Ex. 6 at 13:56-14:19 ⁶ ; Ex. 5 (Condon 107:10-21); Ex. 7 at 2:43-3:34. Director Bill Condon
4	underscored MOVA's importance to the film, continued the "new technology" theme, and credited
5	MOVA with allowing Stevens's performance to come through to the CG Beast in the film:
6	And yes, to your point about, this was, this was one of the scariest challenges jumping into this movie that we had somebody who was at the
7	emotional center of the movie, who was the romantic hero of the movie, who was going to be a CG character, you know, and it was this new process
8	which, you know usually its dots like this and then, and then animators fill in the dots. But this actually captured every pore of Dan's skin, and that's
9	why so much of him comes, this great performance comes through.
10	Ex. 6 at 14:34-15:01 ⁷ ; Ex. 5 (Condon, 107:22-109:9); Ex. 7 at 3:44-5:13. And he told a story about
11	the MOVA facial performance capture for the film's iconic waltz scene that poignantly emphasizes
12	the impact that Disney believed audiences could expect from its use of MOVA in the film:
13	I tell this story about a visual effects supervisor from LA, and her daughter came to visit while he was doing the oddest thing, which was,
14	we were playing Beauty and the Beast, and Dan was just doing the facial expressions imagining that he is dancing with Emma, we
15	finished the take, the girl hadn't seen it shot live, but she was crying, just from what he was expressing on his face.
16	Ex. 6 at 15:02-15:42; Ex. 5 (Condon, 108:22-109:9); Ex. 7 at 5:13-6:19. Disney captured that
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18	performance using MOVA. Ex. 5 (Condon 19:14-20:6).
19	Similarly, before the IMAX advance screening, broadcast on Facebook worldwide on March
20	6, 2017 just over a week before the film's release, Mr. Stevens re-introduced "MOVA" to the

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audience, and continued the theme of how Disney had used it in a new way for a romantic lead:

And, uh, I would go, after a day's filming, ... and my face would be sprayed with UV dots, about ten thousand dots, and I'd sit in this, what I liked to call the TRON cage, which is sort of a UV, UV lights and 27 little cameras, and we'd play all of our scenes again. And Emma would be sitting outside the cage, and I would be inside just, you know, doing anything that I'd been doing the previous two weeks, uh week, with my face, whether it was eating or sleeping or roaring or waltzing, I would sit there and just do it all. And they'd take that information, take it away, morph it into the Beast, and map it onto the body that I had puppeteered on the set. So it's an amazing fusion of

⁶ Ms. Watson, too, was an authorized representative and spokesperson for Disney. Ex. 9.

⁷ Mr. Condon was also an authorized representative and spokesperson for Disney. Ex. 10.

1	these technologies and it's never really been used this extensively before, certainly not for a romantic lead.
2	Ex. 11 at 11:33-12:31; Ex. 5 (Condon, 20:18-22:8, 27:11-15; 109:12-110:9); Ex. 12. Stevens made
3	virtually identical comments promoting Disney's use of MOVA in interviews with Fox 5 Online on
4	March 4, 2017 (Ex. 15 at 2:37-4:10), People Magazine Online on March 16, 2017 (Ex. 13 at 0:59-
5	1:40), and People.com on March 17, 2017 (Ex. 14), the day of the film's theatrical release.
6 7	Condon produced a set of talking points for an interview to promote the DVD release of
8	Beauty and the Beast, which touted Disney's use of "MOVA" for the first CG romantic hero:
9	Q: WHAT DID THAT MEAN IN TERMS OF FACIAL CAPTURE THEN? HOW WAS THAT ACCOMPLISHED?
10 11	BILL CONDON: What it meant though is that at night, he would then have to go sit in a rig, not move his head so that his face is captured.
12	Q: SO ARE THE BEAST'S FACIAL EXPRESSIONS DOWN TO THE MINUTE MUSCULAR TWITCHES DAN'S OWN?
13	BILL CONDON: So every muscle, all those tiny little things are Dan's.
14	Q: WHAT WERE DAN'S CHALLENGES IN DOING THE FACIAL CAPTURE?
15 16	BILL CONDON: His challenge was then to be there and to duplicate the performance he had just given on set.
17 18	Q: HOW DID DAN FEEL ABOUT THE CHALLENGE OF HAVING TO PERFORM UNDER ALL THESE LAYERS OF TECHNOLOGY? WAS HE CONCERNED HIS CHARACTER MIGHT GET LOST OR WOULD HE SHINE THROUGH AS THE
19	FIRST ROMANTIC CG HERO?
20	BILL CONDON: Dan was excited by the challenge of having a performance sort of come through all of that stuff and also the fact that
21	it would be the first CG romantic hero.
22	Ex. 16; Ex. 5 (Condon, 28:8-31:23). And Condon admitted that it was "MOVA" that allowed the
23	capture of "every muscle, all those tiny little things":
24 25	Q So so then at the very bottom of the page is the question "So are the Beast's facial expressions down to the minute muscular twitches Dan's own?" And your answer is "So every muscle, all those tiny little things are are Dan's"?
26	A Yes.
27	Q Was it was it MOVA that allowed you to capture that level of
28	nuance of Mr. Stevens' facial expressions?

1 2	[] THE WITNESS: Yes.
3	Ex. 5 (Condon 31:10-23). Similarly, Hoberman produced a set of interview talking points describing
4	Disney's use of "MOVA" in the film for the press:
5	used MOVA/direct drive for the cgi
6	the house we used was digital domain
7	the reason it's so effective is because they mark thousands of spots on his face in phosphorescent makeup so that the many individual points could be derived from that makeup, like 5000 points.
8 9	Those points allow to get all the nuance of expression.
10	In the film we see Dan's eyes and Dan's facial expressions. But the mouth was replaced. But maintained eyes and every subtlety of his facial expression.
11 12	With headcam won't even get 200 dots on the face, so BATB went up from 200 to 5000 points of reference and helped capture the finer details.
13	Ex. 17; Ex. 2 (Hoberman 73:9-16; 74:14-25; 77:4-16).
14	Disney's use of "MOVA" in Beauty and the Beast was picked up by journalists. In the
15	March 8, 2017 New York Times review, titled "Beauty and the Beast': Disney's \$300 Million
16	Gamble," the critic described the MOVA technology Disney had used to make the CG Beast:
17	Mr. Condon's Beast, for instance, is a fully digitized character. Phosphorescent makeup that appeared blue under ultraviolet light was
18 19	applied to Dan Stevens ("Downton Abbey"), and cameras tracked every pore of his face as he performed; special software then converted his expressions into data and the furry, horned Beast.
20	Ex. 18, at DIS-REARDEN-011288.
21	2. "MOVA" promotion for Guardians of the Galaxy as a draw to filmgoers.
22	Defendants promoted the use of "MOVA" in other films at issue, as well. For example, on
23	July 26, 2014, Kevin Feige, the CEO of Marvel Studios, described the importance of using MOVA
24	to capture Josh Brolin's performance as Thanos in Guardians of the Galaxy:
25	Well, yeah. Utilizing technology is what all these movies are about. I would say that the technology – it's not just, certainly with Thanos, it's not just a
26	vocal performance. It's a facial performance. [] You want a great performance and the reason we were comfortable moving forward with
27	seeing as much Thanos as we do in Guardians is because we had a great actor who was willing to put the dots on his face and do the performance.
28	OPPOSITION TO MOTION FOR BARTIAL SUMMARY

1	Ex. 19. And Marvel issued a joint press release with Luma Pictures (the VFX studio for the CG
2	Thanos character) touting Guardians's use of MOVA:
3	To capture the nuances of his performance, the team combined
4	keyframe animation, traditional performance capture and a relatively new, hi-fidelity facial capture system called Mova . "Unlike traditional
5	gridded methods, the Mova system makes use of UV reactive particulate in a makeup base to give us thousands of trackable points on
6	the surface," comments Paul Molodowitch, Luma's Lead Pipeline TD. "This provided us with a great capture that we could animate on top of,
7	adding additional layers to create the final performance." [] "Lock really delivered a year derful performance for Thomas, he beings
8	"Josh really delivered a wonderful performance for Thanos; he brings the power and seriousness that the character deserves," said Animation
9	Director, Raphael Pimentel. "The data that we got from his performance capture sessions was great to work with, there was a lot of
10	emotion that our animators could build off of and translate to the larger than life super villain."
11	Ex. 20, at DIS-REARDEN-0942.
12	3. The Beauty and the Beast and Deadpool Featurettes touted "MOVA."
13	Disney continued advertising its use of "MOVA" <i>after</i> the film's theatrical release, for sa

touted "MOVA."

Disney continued advertising its use of "MOVA" after the film's theatrical release, for sales of DVDs, Blu-rays, and streaming. The *Beauty of a Tale* featurette featured interviews of Condon and Stevens about Disney's use of MOVA, intercut throughout with clips of Stevens's MOVA facial performance capture. Ex. 21, at 24:28-25:53. Condon credited MOVA's capture of Stevens's performance for making a Beast that audiences could believe in, and for making the film work:

> **Condon:** And then when it came to his face, we used a technology which allowed us not to have to put a big rig of cameras around him as always happens in a CG performance. He was just himself so Emma could play off of him. But then at night, he would have to go into this rig and he would sit there and recreate his performance. *Id.*

> **Stevens:** It's a separate facial capture, which is a whole other challenge, so you have to kind of think yourself back into the scenes that you shot many, one or two weeks ago, and without moving your body, you know, just moving your face do, do the scenes whether they have lines in or not. *Id*.

Condon: So he gets his face sprayed, which means every single muscle is captured, every pore, and that's why I think so much of Dan's performance comes through, because every twitch is captured. *Id.*

Condon: There have been a lot of great CG performances. But this was a romantic hero, someone who was at the emotional center of the movie. I always said we could get everything else in this movie right, but if we didn't get a Beast that people believed in, then it wouldn't work. Id.

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1	And Condon confirmed in his deposition that he was speaking of "MOVA" in that interview:
2	(A video recording was played.) Q All right. So that was one of the interviews that you did for for the
3	Beauty of a Tale featurette?
4	A Sure.
5	Q Okay. And the technology you're describing there was MOVA?
6	[] THE WITNESS: Yes.
7 8	Q And and you were saying it was MOVA's ability to capture every muscle and pore and twitch of Mr. Stevens' face that allowed so much of his performance to come through in the CG Beast character, correct?
9	A Yes.
10	[] (A video recording was played.) Q So you believed that with the CG romantic hero at the emotional
11	center of the film that if you got everything else right but did not get a Beast that people could believe in, the film wouldn't work, correct?
12	[] THE WITNESS: I would say yes, it's I – I did and do believe that as
13	well as other things. It's not a complete statement, I would say.
14	Ex. 5 (Condon 58:9-59:18).
15	Fox similarly touted its use of "MOVA" in a promotional featurette for <i>Deadpool</i> . Visual
16	Effects Supervisor Pauline Duvall described Fox's use of MOVA in the Blu-ray/DVD/streaming
17	promotional featurette called From Comics to Screento Screen: MAGIC!:
18	Digital Domain has a great system called 'MOVA', which is a facial capture system. You paint on the face and it creates thousands and
19	thousands of little tracking markers. At that point, you get a piece of geometry that captures movement and acting of the actor.
20	Ex. 22.
21	B. The Beast Reveal Trailer relied on Contour-based clips as a draw to filmgoers.
22	On November 14, 2016, Disney unveiled a <i>Beauty and the Beast</i> trailer, revealing the CG
23	Beast to audiences. Ex. 23. The Beast appeared almost entirely in MOVA-based film clips. The
24	trailer featured eleven clips of the Beast, and Mr. Condon confirmed that at least <i>nine</i> were based on
25	"MOVA." Ex. 5 (Condon 110:14-114:13); Ex. 23 at 0:54-57; 0:59-1:03; 1:24-:26; 1:33-:36; 1:36-
26	:40; 1:41-:43, 1:53-:54; 1:55-56; 1:56-:58; Ex. 24. Shortly after the trailer's release on YouTube,
27	Disney reported it had set a new record with over 127 million views in the first 24 hours, and was
28	OPPOSITION TO MOTION FOR PARTIAL SUMMARY JUDGMENT ON CAUSAL NEXUS ISSUE

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1	among the top-trending videos on YouTube. Ex. 25 (RFA 2-3). Within the first half hour of the
2	trailer's launch, #BeautyAndTheBeast was the leading trend worldwide on Twitter. <i>Id.</i> , (RFA 4).
3	And the trailer's success was reported in the media. Ex. 26; Ex. 5 (Condon, 56:8-57:1).
4	A 2018 National Research Group ("NRG") report prepared for Fox entitled
5	concluded that
6	(Ex. 27 (FOX-REARDEN-01375)), trailers were
7	(Id.),
8	(Id., at 01377), and for moviegoers between 18 and 45 years old,
9	(Id., at 01378). Most pertinently, the NRG report found that
10	. <i>Id.</i> , at 01379. Hoberman confirmed this finding:
11	Q. It seems obvious but the purpose of the trailer is to induce audiences to come see the film; isn't that correct?
12	A. Yes.
13	Q. To spark interest in it?
14	A. Yes.
15 16	Q. And that a successful, you know, widely seen trailer would motivate at least some people to come see a movie? []
17	THE WITNESS: Yes.
18	Ex. 2 (Hoberman 55:6-17).
19	Philip Fier, former Vice President and Chief Financial Officer of 20 th Century Fox
20	International and current owner of Focus Advisory Services LLC, agrees that trailers drive film
21	attendance. Fier Dec. ¶¶19-28. And he confirmed the NRG conclusion independently. <i>Id.</i> , at ¶¶20-
22	21. He testifies by declaration that the <i>Beauty and the Beast</i> trailer released on November 14, 2016
23	was exceptionally successful, that the Beast was an important factor in its appeal, and that at least
24	some moviegoers likely saw the film at least partially because of the trailer. Fier Decl. ¶¶19-29.
25	C. The Contour system was critical to humanize the CG Beast so that audiences could empathize with him and believe that Belle could love him.
26	In making <i>Beauty and the Beast</i> , it was important to show the human within the Beast, so that
27 28	audiences could empathize with him. The Disney press kit stressed this point:

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1	One of the keys to a successful live-action adaptation of "Beauty and the Beast" lay with the Beast. The cursed creature has to look somewhat believable <i>and be someone with whom the audience will care for</i> , but the technology needed to pull off such a feat did not exist until recently.		
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4	Ex. 3, at DIS-REARDEN-07968. Condon agreed. He said of the Paris press conference:		
5	(A video recording was played.) MR. CARLSON: All right. And then that's Ms. Watson talking about how you were able to use MOVA to make the CG to make the CG		
6	Beast more human and to capture the subtleties of Mr. Stevens' facial expression; is that correct?		
7	[] THE WITNESS: Yes.		
8 9	Q And and that was what you were going for, right? You were you were you wanted to make the Beast as it appeared on the screen to		
10	seem human to the audience, correct? [] THE WITNESS: And and I would say no. Obviously, he's a beast, not human, but you wanted to have a vestige of the human the person,		
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12	the man who it was underneath the Beast, you know, so, obviously, it's always a you don't want him to be a human, but you want to have a sense of the human being underneath. That was what we were going for.		
13	[]		
14	Q I mean, that's really the challenge, right? Because he has to be both believably a beast and yet also believably human at the same time.		
15	A Yes, he has to be he is some combination. He is a human who has been turned into a beast, yes.		
16 17	MR. CARLSON: Then let me just move forward one more time. (A video recording was played.)		
	MR. CARLSON: Let me just stop there.		
18	Q So so that was really the challenge that we were talking about. You you have not only do you have to portray this character as		
19 20	being, you know, both beast-like and and human, but this is it's not a peripheral character. He's he's at the emotional center of the film and he's, more than that, the romantic lead?		
21	A Correct.		
22	Ex. 5 (Condon 13:1-14:17); Ex. 6 (14:34-15:02). Hoberman agreed that showing the Beast's human		
23	side was important so filmgoers could empathize with him and believe Belle could love him:		
24	Q. Then at other times the Beast has to be able to believably express his inner humanity and his human feelings and his growing love for Belle; right?		
25	A. Yes.		
26 27	Q. And it was important that the audience be able to empathize with the Beast character in "Beauty and the Beast"?		
$\begin{bmatrix} 27 \\ 28 \end{bmatrix}$	the beast character in beauty and the beast?		
20	OPPOSITION TO MOTION FOR BARTIAL SUMMARY		

1	A. Yes.		
2	Q. And it was ultimately important for the audience to be able to believe that Belle could fall in love with the man inside the Beast?		
3	A. Yes.		
4	Ex. 2 (Hoberman 10:17-11:3). He believed that to get a Beast the audience could empathize with		
5	was important to capture as much of Stevens's performance as possible and transfer it to the Beast		
6 7	 Q. Did you think that it was important to try to capture as much of Mr. Stevens' performance as the Beast as you could in the CG character as it appeared in the film? A. That's where I got tripped up, "in the CG character in the film." The answer to capturing as much of Dan Stevens as possible, yes. Q. Okay. And did you think it was important that the CG Beast character as it appeared in the film reflect Mr. Stevens' performance as the Beast? A. Yes. 		
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12 13	Q. Did you believe that Mr. Stevens' performance as the Beast would help audiences to empathize with the CG Beast character?		
14	[] A. Yes.		
15	Ex. 2 (Hoberman 51:2-20).		
16	Condon agreed. Ex. 5 (Condon 40:11-15). Speaking of the Facebook IMAX advance-		
17	screening press conference, Condon confirmed that it was MOVA that made it possible to preserve		
18	the human nuances of Mr. Stevens's performance:		
19	Q Mr. Stevens was talking about the the – how he could see the elements of his performance in the final CG character, and I'm asking you		
20	wasn't it the MOVA technology that allowed you to take the elements of his facial performance and preserve them in the CG character?		
21	[] THE WITNESS: Yes.		
22 23	Id. (Condon 26:25-27:10); Ex. 11 (11:33-12:31). Stevens confirmed Condon and Hoberman in his		
24	People.com interview. After describing how MOVA was used to capture his facial performance in		
25	Beauty and the Beast, he stated:		
26	The British actor adds that he and director Bill Condon, along with the effects team, went that extra mile with facial capture in order for audiences to be able to see Beast's human qualities.		
27	Ex. 14.		
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Professor Angela Tinwell agrees. Dr. Tinwell is uniquely qualified to shed light on the				
central issue here—whether the copying of the Contour program inherent in defendants' use of the				
system likely influenced filmgoers—because she studies human reactions to CG characters. Tinwell				
Decl. ¶¶ 1-5, Tinwell Ex. A. By declaration, she explains that human beings are intensely sensitive				
to subtle nuances in the facial expressions of others, and her research confirms that this sensitivity				
extends to CG characters. <i>Id.</i> , ¶¶ 10, 25-35. If these expressions are not faithfully captured in CG				
characters, viewers are likely to respond adversely. Id. Adverse reactions may extend from				
uneasiness to dread, but most pertinently, her research demonstrates that when CG characters' facial				
expressions lack expected subtle nuances, viewers are unable to empathize with the CG characters.				
Id., at ¶¶36-38. Her research shows that children exhibit this same adverse response to CG				
characters lacking natural facial expression, and it is particularly acute in young girls. Id., ¶¶39-41.				
Dr. Tinwell correlated this adverse response to CG characters lacking expected nuance in				
their facial expressions with examples of films that featured them and did poorly at the box office.				
Id 1912 66. All of the poor performing films used conventional key froming or lovy density				

Dr. Tinwell correlated this adverse response to CG characters lacking expected nuance in their facial expressions with examples of films that featured them and did poorly at the box office. *Id.*, ¶¶42-66. All of the poor-performing films used conventional key framing or low-density marker-based facial capture. *Id.* The subtlety and nuance of natural human facial expression was beyond these technologies to reproduce within the constraints of film budgets and production schedules. *Id.* at ¶71. Dr. Tinwell contrasted these films with the advent of high-density facial performance capture, the first being the Contour system, capable of capturing all of the subtlety and nuance of an actor's facial expression. *Id.*, ¶¶67-71. As an example, she cites *The Curious Case of Benjamin Button*, one of the first released films that used Contour. *Id.*, ¶¶72-78.

Disney used the Contour system extensively in *Beauty and the Beast* in hundreds of shots:

Condon testified that *he needed a "MOVA reference" of Stevens whenever a shot included the Beast*.

Ex. 5 (Condon 42:15-43:8). Rather than comment on all, Dr. Tinwell closely examined several popular scenes from *Beauty and the Beast*, and demonstrated how the Contour system captured the subtle nuances required for the CG Beast to express genuine human emotion to audiences.

The Library Scene. The Beast introduces Belle to his library. Belle, amazed, gasps "Have you read all of them?" And the Beast replies humorously, "Well, not all of them, some of them are

in Greek." Delighted, Belle asks "Is that a joke? Are you making jokes now?" Tinwell Decl. Ex. 5.			
Hoberman reported to Condon that Alan Horn, Chairman of Walt Disney Studios, asked to fine-tune			
the Beast's facial expression in this scene because he regarded it as most important to show another			
side of the Beast. Ex. 29. This scene was based on "MOVA." Ex. 5 (Condon 50:4-51:8; 112:13-			
22); Ex. 30. And a portion appears in the trailer. Ex. 23 at 1:36-40; Ex 24 at 2:54-3:14.			

Dr. Tinwell viewed both this scene from the film and a clip produced by DD3 showing how the Beast's facial expressions were created using the Contour system. Tinwell Decl. ¶80; Exs. 4, 5. She notes how non-verbal communication captured in Stevens's performance and transferred to the CG Beast's face provided essential context for the audience to appreciate the new humorous side of the Beast's character. Tinwell Decl. ¶¶ 80-88.

The Waltz Scene. The Beast and Belle dance a waltz in the castle's ballroom. Tinwell Decl. Ex. 6. Not a word is spoken. As early as August 14, 2014, in a first meeting with the director, Condon identified the importance of this scene, as the point where "the audience will start to fall in love with the Beast at the same time as Belle does." Ex. 31. Mr. Condon confirmed that the waltz scene was based on "MOVA" facial performance capture. Ex. 5 (Condon 19:14-20:6; 114:7-13). And portions appear in the trailer. Ex. 23 at 1:41-43; 1:56-58; Ex 24 at 4:41-4:57.

In this scene, Dr. Tinwell identified subtle non-verbal communication in the flare of the Beast's nostrils, the corners of his lips, his cheeks and brows that "would not have been possible without capturing the full range of facial expressions that Dan Stevens performed in his MOVA facial performance capture that were retargeted onto the animated Beast." Tinwell Decl. ¶¶ 89-95.

The Snowball Scene. The Beast and Belle are outside in the snow, and he is startled when she throws a snowball at him. He throws one at her in return. Tinwell Decl. Ex. 7. Condon confirmed that this scene was based on "MOVA." Ex. 5 (Condon 149:17-150:4).

In 2011, Dr. Tinwell performed human experiments involving subjects viewing CG characters purporting to show a startled expression, and found that a lack of upper facial movement in CG characters invoked an uneasy response compared to the control group. Tinwell Decl. ¶95. In the Snowball Scene, she identifies brow lifts and other non-verbal communication that the audience

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expects from a startled human-like character. *Id.* She also identifies non-verbal communication in the Beast's inner brow and cheek that allows the CG Beast to convincingly express concentration (for throwing) and delight (in hitting his target). *Id.*, at ¶96-97.

Stevens's facial performance captured using Contour gave audiences a human-like Beast they could believe in, empathize with, and believe that Belle could romantically love. Tinwell Decl. ¶10. "[F]ewer film-goers would have seen *Beauty and the Beast* originally, whether in theaters, on DVD or Blu-ray, or by streaming, and fewer would have seen the film more than once, if MOVA Contour facial performance capture had not been used in the Beast's animation pipeline." *Id.* Consequently, "at least some of the film's revenue can be directly attributed to the use of MOVA Contour facial motion capture for Dan Stevens's facial performance as the Beast." *Id.*

D. Use of the Contour system avoided significant cost of hand animation by VFX artists to approximate the level of subtle nuance that "came for free" with Contour.

Revenue and expense are two sides of the same coin; in other words, all else being equal, an increase in revenue or reduction of expense equals increased profit. In the causal nexus inquiry, it is appropriate to consider whether infringement caused avoidance of increased costs. *Charter Sch. Capital, Inc. v. Charter Asset Mgmt. Fund, LP*, 2016 WL 5921062, *3 (C.D. Cal. 2016).

In his PhD thesis, defendants' expert Hao Li wrote that "[t]he main advantage of using high-resolution capture data over alternative animation techniques, such as physical simulation or keyframing, is that *realistic and complex surface dynamics come for free*." Ex. 32 (Li 66:7-13). He agreed that high-resolution facial performance capture reduces time and labor:

Q. What you're saying here is that, you know, if you want to do realistic and complex surface dynamics, you know, for – for facial performance using physical simulation or keyframing, it takes a lot of time and animators to do that work, its labor intensive, whereas all of the—you know, the—you know, the nuances, the realistic and complex nuances of a person's facial expression, those—those come along for free, essentially, if you have a high-resolution capture data.

[...]

THE WITNESS: That's right.

Id. (Li 67:16-68:5). And Dr. Tinwell agrees. Tinwell Decl. ¶¶71, 104, 107. Defendants' unauthorized copying of the Contour program allowed the Contour system to achieve natural, subtle,

nuanced, human facial expression that otherwise would have required substantial additional animator person-hours—and consequently substantial additional expense—to even approximate. *Id*.

III. DEFENDANTS' SUMMARY JUDGMENT ARGUMENTS ARE NOT PERSUASIVE

A. That defendants can hypothesize "innumerable" or "myriad" reasons why a moviegoer might see a film does not make the causal nexus to revenue speculative.

Defendants hypothesize numerous reasons why a purchaser might have seen a film, but this does not make the infringement's causal nexus to revenue speculative *per se*. Their argument runs counter to longstanding Ninth Circuit precedent that a copyright owner is not required to prove causal nexus by showing that the infringement was the *only* reason *or even the main reason* for the infringer's revenue. *Griffo*, 2018 WL 6265067 at *12; *Garcia*, 2009 WL 799393 at *4; *see also*, *Mackie*, 296 F.3d at 911 (plaintiff seeking indirect profits must offer evidence that the infringement "at least partially caused the profits that the infringer generated as the result of the infringement.").

Defendants rely on cases that simply do not apply. In *Mackie*, 296 F.3d 909 (9th Cir. 2002), the infringement was a picture of Mackie's art, called The Tango—the dance steps of the tango cast in bronze and set into a concrete sidewalk. It was inserted in a brochure for the Seattle Symphony's concert season. But the brochure "advertised a series of concerts that were unrelated to the artwork itself." *Mackie*, 296 F.3d at 916. The Symphony did not use The Tango to *make* the concert performances. And the Symphony did not tell potential audiences about The Tango, how it works, how the Symphony had used it in concert performances, or that The Tango was new and used by the Symphony in a new way in concert performances. It did not use The Tango as a draw to audiences.

Similarly, in *Dash v. Mayweather*, 731 F.3d 303 (4th Cir. 2013) the infringement was a song played for boxer Floyd Mayweather's entrance to Wrestlemania events that copied Dash's song "Yep." But World Wrestling Entertainment did not use Yep to promote the events to potential audiences, it did not tell potential audiences that Yep was a new song that would be used in the events in a way never before heard. It did not use Yep as a draw to audiences.

And in both cases, the ruling that a causal nexus had not been proved by the copyright holder rested on the copyright holder's *failure to produce proof*. The Court's ruling in *Mackie* was based on Mackie's expert's admission "that he could not 'understand' how it would be possible to establish a

causal link between the Symphony's infringing use of 'The Tango' and any Pops series revenues generated through the inclusion of the collage in the direct-mail literature." Mackie, 296 F.3d at 916. And Dash argued that he was not required to submit any evidence linking the WWE revenue streams to the infringement. Dash, 731 F.3d at 332. In that context—with no evidence linking revenue to infringement—the courts could not find a causal link where other plausible audience draws were possible. But here, Rearden has submitted on-point expert testimony from Dr. Tinwell and Mr. Fier supporting a causal nexus between Defendants' infringements of Contour and their revenue from the films at issue, as well as substantial other evidence that defendants used MOVA in their promotion of the films at issue to act as a draw to audiences, and as a means to reduce cost.

B. Defendants' argument that infringer profits are not available in software cases because users do not see the copied code, itself, is contrary to precedent.

The Copyright Act defines a "computer program" as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. The Ninth Circuit has "long held that a computer program is copyrightable as a 'tangible medium of expression." *Wall Data Inc. v. Los Angeles County Sherriff's Dept.*, 447 F.3d 769, 776-77 (9th Cir. 1984). The unauthorized copying of copyrighted software into RAM made when using the software is a copyright infringement. *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 (9th Cir. 1993). And the copyright owner is entitled to recover for this infringement its actual damages and the portion of the infringer's profits attributable to the infringement. 17 U.S.C. § 504(b).

Defendants argue that a software copyright owner cannot recover infringer profits if "no consumer saw (or could have seen) the infringing copy of ... software residing in computer RAM." EDF No. 249 at 16. But that argument is contrary to *Oracle America, Inc. v. Google, Inc.*, 2016 WL 234365 (N.D. Cal. 2016). Oracle sued Google for infringement of its copyright in the Java software, alleging Google copied the declaring code and structure, sequence, and organization of 37 Java API packages in its Android operating system. *Id.*, at *1. Oracle sought indirect profits from Google's infringements, including advertising and search revenue from Android devices. *Id.* Obviously, no Android user who performed searches on Android devices ever saw the copyrighted Java source code on their screens. Yet when Google moved to exclude Oracle's expert's testimony regarding

gross advertising and search revenues on the ground that the causal nexus between infringement and revenue was too attenuated, the Court held that the expert's rebuttal report contained a "platform contribution factor" theory that could satisfy the causal link requirement. *Id.*, at *5. There was no requirement that Oracle must prove that any Android user ever saw the copied Java code itself.

Nor does *Polar Bear* support defendants' argument. Polar Bear won at trial on its claim that Timex infringed its copyright in an "extreme kayaking" video that Timex used to promote its "Expedition" brand watches. The verdict awarded Timex's profits from three sources: (1) direct sales at trade shows where the video played; (2) a promotion for a soft drink that used a video still; and (3) *overall enhancement of brand prestige that allowed Timex to raise prices on all Expedition watches based on their association with the video. Polar Bear*, 384 F.3d at 712. *Affirming* the verdict for Polar Bear on (1) and (2), the Court rejected the "brand prestige enhancement" theory.

Defendants misrepresent *Polar Bear's* rejection of the "brand prestige enhancement" theory as resting on the fact that "[a]ctual retail purchasers were never exposed to the infringing images from the trade shows" (ECF No. 249 17:1-4). But that sentence continued "nor did the evidence link retail consumers to the trade show promotion," "[n]or was there evidence that vendors at the trade shows somehow transmitted enthusiasm to retail customers." Polar Bear, 384 F.3d at 715. The Court concluded Polar Bear's evidence was insufficient to link infringement to "brand prestige" profits "because they do not explain how the infringement influenced the purchasing decisions that lead to increased prices and ultimately to increased profits." *Id. Polar Bear* did not lay down a new rule that no copyright holder can recover infringer profits unless customers saw the infringing copy. Rather, the Court held that with no evidence that customers were exposed to the infringement and no other evidence linking the infringement to profits, the "brand prestige enhancement" theory failed. But here, the very link that was missing in *Polar Bear* is supplied by defendants, themselves, because they introduced the "MOVA" technology to potential audiences when promoting the films at issue, and used "MOVA" to act as a draw to filmgoers to see the films.

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C. Defendants' argument that MOVA is only "a preliminary step" of creating a motion picture is an *apportionment* argument, not relevant to *causal nexus*.

Defendants argue that "the actual use of the software made only a minute contribution to the completed Motion Pictures," and "[t]hat contribution was dwarfed by innumerable other creative efforts" *Id.* at 17. Their "Factual Background" details each step in the CG character animation pipeline after defendants' infringing copying of Contour: the "hundreds or even thousands of hours of human labor and artistry" required, "the performances of many actors," the script, sets, costumes, music, and "the work of hundreds of other creative and technical personnel." *Id.*, at 10, 13, 14.

But the Ninth Circuit treats "the creativity of producers, performers and others involved in staging," costumes, and sets as matters that "will largely be taken into account when deducting the defendants' costs." *Frank Music Corp. v. Metro-Goldwyn-Mayer Inc.*, 886 F.2d 1545, 1549 (9th Cir. 1989) (*Frank Music II*). In other words, they are part of the apportionment stage, where the burden shifts to defendants to prove expenses and elements not attributable to the infringement. The parties agree that we cannot "skip to the apportionment stage" in this motion. ECF No. 249 at 23.

Defendants' reliance on *Lowrys Reports, Inc. v. Legg Mason, Inc.*, 271 F.Supp. 2d 737 (D. Md. 2003) is misplaced. Lowrys owned the copyrights in stock market analyses that Legg Mason infringed, and sought an apportionment of all \$4.63 billion of Legg Mason's gross revenue. But Lowrys's expert *admitted he could not say whether the infringements were causally related to Legg Mason's profits. Id.* So *Lowrys* is like *Mackie*, where the plaintiff's expert admitted he could not say revenue was causally related to the infringement, or *Dash* where the plaintiff proffered no causal evidence. *And in the absence of evidence of causation*, the court found the correlation speculative. There was no evidence that Legg Mason advertised its use of Lowrys Reports as a draw to investors, as defendants did here when they used MOVA to act as a draw to potential audiences. And Rearden has presented on-point expert testimony of a causal link between infringement and profit.

Similarly, in *Complex Sys., Inc. v. ABN Ambro Bank N.V.*, 2013 WL5970065 (S.D.N.Y. 2013), CSI's expert Smith, like *Mackie*, testified that he knew of no impact the infringement had on Ambro's revenue. *Id.*, at *9-11. And unlike here, the bank's Chief Administrative Officer testified that it "does not promote its use of BankTrade [(the infringing software)] to its customers." *Id.*, at

*12. The Court concluded "[i]n this ruling, the Court does not suggest that there is no scenario in which a copyright holder—and even CSI on a different record—could demonstrate a sufficient causal nexus, even when multiple factors are contributing to a company's profits." Id., at 14.

And in *Point 4 Data Corp. v. Tri-State Surgical Supply & Equip., Ltd.*, 2012 WL 3306575 (E.D.N.Y. 2012), the plaintiff sought indirect profits from a medical supply business because of its use of infringing backroom software for processing orders, invoices, financials, and inventories. Like *Mackie*, the medical supplies sold were "unrelated to" the back room infringement. Nor did Tri-State promote its use of Point 4's software as new, never before seen, as a draw to customers.

Finally, defendants argue that the availability of Disney's own Industrial Light & Magic software (Medusa) and two other products that "could have provided the same functionality as MOVA" makes causal nexus "even more remote" here. But when this Court enjoined DD3's further use of the Contour system on June 17, 2016 (SHST v. Rearden, 3:15-cv-00797 ECF No. 208-1), while DD3 was still working on Beauty and the Beast, DD3's President O.D. Welch filed declarations stating that the work could not be completed without access to Contour. SHST ECF No. 208-1 ¶13, ECF No. 222-2 ¶3. And the Special Master has found in that case that DD3 continued using Contour in violation of the injunction for over a month. SHST ECF No. 577 at 2-3. If it were true, as defendants argue, that other non-infringing software provided the same functionality as Contour, then DD3 would have opted for that software rather than continue using Contour in violation of this Court's injunction. Defendants cite Complex Sys., 2013 WL 5970065 * 11, but there the court only recited deposition testimony in the opinion's fact section that is not relied upon in the court's analysis. And they cite to a footnote in the Fourth Circuit's Dash, 731 F.3d at 332 n. 18, but that footnote plays no role in the court's analysis. At best, defendants rely on dictum.

- D. Rearden's theories do not rely on speculation or misunderstand copyright.
 - 1. Defendants assert only credibility issues with respect to their use of "MOVA" in the films at issue to act as a draw to audiences.

Defendants argue that in the studio, director, producer, and cast comments and studio documents touting use of "MOVA," "[t]he references to MOVA ... are general references to the entire facial motion capture process, which comprised of a host of non-MOVA hardware and

software tools and non-copyrightable processes." ECF No. 246 at 20. But the record belies this argument. *See* evidence cited at pages 7-14, above. In fact, Condon testified he did not even know about the other animation processes that defendants refer to here. Ex. 5 (Condon 185:11-186:24; 187:23-189:10). Defendants argue that their witnesses meant, and their documents were intended, to say something different from what they actually said. And they are free to do so *at trial*. But this argument presents only credibility issues that cannot be resolved here on summary judgment.

2. Use of software is not a defense to unlawful copying of software.

Defendants try to confuse matters by arguing that Rearden's claim for copying the Contour program is a claim for *use* of the program, and use is not protected by copyright. ECF No. 246 at 21-22. Their argument is pure sophistry. Their own expert, Hao Li, conceded that every time a computer uses the Contour program, it makes a copy of the program into RAM. Ex. 32 (Li 108:19-109:4); ECF No. 249-15 at ¶16. And the Ninth Circuit has held that, if unauthorized, this copy into RAM is a copyright infringement. *MAI*, 991 F.2d at 518. The Copyright Act does not make use of software an exception to the copyright owner's exclusive right to make and authorize reproduction of a protected work, nor does it make use of software a defense to copyright infringement. And *MAI* refutes Defendants' argument, because if copying software into RAM is an impermissible copyright claim for *use* of the software, then there could have been no infringement in *MAI*.

CONCLUSION

Defendants chose to use the "magic" of MOVA in repeated descriptions of its software-implemented technology to *promote* the films at issue to potential audiences, to create a sense of *excitement and anticipation* in potential audiences, to give them the impression that they would see something *new and revolutionary* in the films at issue, *to act as a draw to audiences*. And that choice paid off in some measure of film profit to be determined at the apportionment stage of the damages trial in this case. But the consequence of that choice is a trail of documentary, video, and testimonial evidence of the causal nexus between defendants' infringements of the Contour program and revenue of the films at issue. Accordingly, the Court should deny defendants' Motions for Partial Summary Judgment on Causal Nexus Issue.

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